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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,329	02/26/2004	Pascal Latreille	20513-00590-US1	1956
30678	7590	01/25/2005	EXAMINER	
CONNOLLY BOVE LODGE & HUTZ LLP SUITE 800 1990 M STREET NW WASHINGTON, DC 20036-3425			PALABRICA, RICARDO J	
		ART UNIT	PAPER NUMBER	
		3641		

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/786,329	LATREILLE
	Examiner Rick Palabrica	Art Unit 3641

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 15-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_ is/are allowed.
- 6) Claim(s) 15-19 is/are rejected.
- 7) Claim(s) 16 and 18 is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. ____ .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date ____ .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: ____ .

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 15-19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 15 recites the limitation, "handling means which can be used to remove the section of the primary pipe which has to be replaced and the new replacement section." Underlining provided. There is neither an adequate description nor enabling disclosure as to how and in what manner one can replace a section of the pipe when both the section to be replaced and its replacement are removed.

Claim 15 recites the limitation "pressurized water connecting a first and a second component of the primary circuit of a nuclear reactor". Underlining provided. The term "connecting" means joining two or more structures with each other. There is neither an adequate description nor enabling disclosure as to how and in what manner a

pressurized water (i.e., a liquid) can connect two, normally massive components of the primary circuit of a reactor.

Claim 15 recites the limitation of a "handling means which can be used to remove the section ..." and "means for working within the primary pipe..." Note that the preamble recites a unitary apparatus, i.e., "means for replacement of a section of a pipe." There is neither an adequate description nor enabling disclosure as to how and in what manner such single apparatus can be external to a pipe (i.e., performing handling tasks) and, at the same time, be internal to a pipe (i.e., working within the pipe). See also section 2 on this matter.

2. Claims 15-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are vague, indefinite and incomplete as to how and in what manner one can replace a section of a pipe when both the section to be replaced and the replacement pipe are both removed by the handling means. As presently set forth, the metes and bounds of the claims are undefined because the criterion for achieving the intended pipe replacement under said incongruous condition is not specified.

The claims are vague, indefinite and incomplete because the claimed "means for replacement of a pipe" connotes a unitary apparatus (rather than an aggregate apparatus) that can perform all tasks, both externally and internally to a pipe. As presently set forth, the metes and bounds of the claims cannot be determined.

The claims are vague, indefinite and incomplete as to how and in what manner one can physically connect two, usually heavy components of the primary circuit by pressurized water. As presently set forth, the metes and bounds of the claims are undefined because the criterion for achieving the intended connection is not specified.

Claim 15 recites the limitation "the primary pipe" in line 3, 10 and 11, and the limitation "the primary circuit" in line 12. There are insufficient antecedent bases for these limitations in the claim. Note that the claims are directed only to a section of a pipe, and they do not include the primary circuit of the pressurized water reactor. The said primary circuit and the primary pipe are part of the intended use of the claimed apparatus.

Claim 15 recites the limitation "it" in line 11. There is insufficient antecedent basis for this limitation in the claim.

Claim 16 recites the limitation "it" in the last line. There is insufficient antecedent basis for this limitation in the claim. Also, the addition of the word "type" in claim 16 extends the scope of the expression as to render it indefinite.

Claim 17 recites the limitation "the support" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 18 recites the limitation " a horizontal surface of the component of the primary circuit". There is insufficient antecedent basis for this limitation in the claim.

Claim 19, which depends from claim 15, recites the limitation of "an access gangway to apart communicating with the interior of the primary pipe of the component of the primary circuit." Claim 15 recites in the preamble the subcombination of a "pipe"

that is inconsistent with the body of the claim that recites limitations directed to the combination of a pipe and a component of the primary circuit. This inconsistency presents the question as to whether the claim recites a combination or subcombination. There is also insufficient antecedent basis for the limitation that is directed to the combination rather than to the subcombination because the primary circuit is not positively recited as an element of the claimed invention. The primary circuit is part of the intended use clause in claim 15.

### ***Claim Objections***

3. Claim 15 is objected to because the second limitation, "means for supporting the end parts of a new replacement section ..." is redundant. Appropriate correction is required.

4. Claims 16 and 18 are objected to as undecipherable because the language is totally convoluted. Appropriate correction is required.

For example, claim 16 recites the limitation, "comprising two sets of wheel and drive motors providing a rotational drive to at least one wheel in each set of wheels of the carriage for moving it within the primary pipe." It is unclear as to which element of the claimed apparatus this limitation is associated. Also the antecedent for the word, "it" is unclear.

The same remark applies to claim 18 and, for example, the limitation, "surrounding a vertical axis opening providing access ..."

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. Claim 15 is rejected under 35 U.S.C. 102(b) as being anticipated by either one of Martin (U.S. 4,847,038) or Martin et al. (U.S. 4782,727).

Martin discloses a procedure for replacement of a steam generator of a PWR. He discloses that two sectioning operations 38 and 39 are performed to separate bends 40 and 41, which bends are replaced two bends of different geometry and welded to ends of pipes 3 and 4 (see col. 7, lines 1+). Applicant's claim language "pipe section" reads on either one of Martin's bend 40 or 41.

As to the other claim limitations, Martin discloses: a) an orbital sectioning machine as a means for cutting a section of the pipe (see column 7, lines 10+); b) a TIG orbital welding process for a means for bevel welding; c) crown ring 70,72 as a means for supporting the end parts of the replacement section.

Martin discloses a chamfering machine that can be disposed inside primary pipe 3 or 4 (see paragraph bridging cols. 10 and 11). He also discloses that adjustment of the chamfering machine cab e done by an adjusting device (see col. 11, lines 5+). Applicant's claim language: a) "means for working within the primary pipe" reads on the adjustable part 91 of the chamfering machine; and b) "means for introducing the means for carrying out work" reads on Martin's adjusting device.

As to the claimed handling means for the replaced section of the pipe and the replacement section, this reads on the expedient for moving the replaced bends and replacement bends in Martin. Note that handling means for heavy objects, such as pipes, are inherently present in a nuclear reactor.

Martin et al. disclose an apparatus for replacement of a thermal sleeve in a PWR. Applicant's claim language reads on Martin et al.'s apparatus as follows: a) "pipe section" reads on pipe 1 (see Fig. 1); b) "means for cutting out pipe section" reads on cutting device shown in Fig. 3 (see also col. 6, lines 20+); c) "means for bevel welding" reads on orbital TIG welding machine (see col. 10, lines 28+); d) "means for supporting end parts" reads on docking chain (see col. 10, lines 18+); e) "means for working within the primary pipe" reads on the shown inside pipe 1 in Fig. 5; f) "means for introducing the means for carrying out work" reads on the expedient for introducing the device in Fig. 5 within pipe 1.

Note that the claims do no recite the nature of the task performed by the means for working within the primary pipe. Either one of the Martin or Martin et al. therefore meets the claim limitation because their apparatus perform some work inside the pipe.

The claimed invention is directed to a pipe replacement apparatus that can be used not only for a pressurized water reactor but also for a plurality of other installations including a chemical processing plant, a fossil fuel plant, or even other types of nuclear power plants (e.g., a BWR).

The claim contains statement of intended or desired use, i.e., "of the primary circuit of a nuclear reactor cooled by pressurized water," which does not serve to patentably distinguish the claimed structure over that of the reference, as long as the structure of the cited references is capable of performing the intended use. See MPEP 2111-2115.

See also MPEP 2114 that states:

A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. *Ex parte Masham*, 2 USPQ2d 1647.

Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531.

[A]pparatus claims cover what a device is, not what a device does." *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 15 USPQ2d 1525, 1528.

As set forth in MPEP 2115, a recitation in a claim to the material or article worked upon does not serve to limit an apparatus claim.

Any one of the systems in the cited references is capable of being used in the same manner and for the intended or desired use as the claimed invention.

6. Claims 16 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by either one of Martin et al. Applicant's claim language reads on Martin et al.'s device shown in Fig. 5 as follows: a) "robot arm" reads on element 71; b) "support" reads on frame 66; c) "carriage" reads on element 74; "wheels" read on pinions 76 and 78; "access gangway" reads on the aperture of pipe 1.

***Information Disclosure Statement***

7. The information disclosure statement filed 3/24/03 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because copies of the listed references, including the English language copy of the cited French Search Report, have not been provided. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609 ¶ C(1).

Applicant alleges that patents or publications marked with double asterisk (\*\*) next to the Cite No. in the PTO/SB/08 are not supplied because they were previously cited or submitted to the PTO in prior application 10/394,219. The Examiner disagrees. First, none of the documents in said PTO/SB/08 is marked with a double asterisk. Second, a review of the files for 10/394,219 did not indicate that the listed documents in PTO/SB/08 have been submitted.

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. References C-E further illustrate prior art..

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rick Palabrida whose telephone number is 703-306-5756. The examiner can normally be reached on 6:30-5:00, Mon-Thurs..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Carone can be reached on 703-306-4198. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RJP  
October 4, 2004

